SEQUENCE LISTING

<110> Cuellet, Thereee
Miki, Brian
Foster, Elizabeth
Martin-Heller, Teresa
Tian, Lining
Brown, Daniel C
Zhang, Peijun
Hattori, Jiro
Malik, Kamal
Wu, Keqiang
Tropiano, Raymond
Theilmann, David A

<120> Translational Regulatory Elements

<130> 08-885707us2

<140>
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<160> 21

<170> PatentIn Ver. 2.1

<210> 1
<211> 2224
<212> DNA
<213> Nicotiana tabacum

<400> 1
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agagatattg gcttttcaac aactagtaca taaatatgcg actttgaccg tgtatcccca 120

gtcaaaaggg aacttcaccc tcctagttct ttatttccaa catacatggg gagtaatgct 180

aaatttacat agaagaataa taaaatgaac tgtaactaat gatgtactgt tccaaagaga 240

tgaggacgtc aacatattta ttccttcagc ccttttcaga ataataccat aagtagaaga 300

aatggcacat aaaatgaagt cctcggcaag tcaaatgtaa atctgaaccc acccagctaa 360

cccagtgaac tcaacttttcc tggatagatc agcactcctt catgacattg catgccttct 420

ctttaaagag ccgcttgatc tctgaaaacc aaatgaatct ccacagagag atttcgagct 480

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aactgcattt tgccgcttaa gatgcttcgg cgctttgtga attttaagtc atgagaaagt 600

acaatgttgg aatctcacat tagaacaatg tatttgtaat aacctaggaa agcaaagcta 660

gaagggaggt gcagctaaat cttcttctac cttgttatcc ttgcatttct tgaggaggag 720

gaactgtcct cgcaggtgca aaatctgcag tcgcccaaaa ggatattcag aagtatatta 780

caacatgttt aatggttaac caagtgaaag atcaaaatag tcattagaac aaaatgcgtg 840

ctcagagcgt atctactagt tcatcaaccc agtacacatc tctgaatttc atcttcttgcc 900

gttgaactaa gtcaattggt caaagacgca taacatgaga gacactcata aaacggctga 960

ataacatgca gaagacgtca tgcgccttag gtctcattat gcatgagatt attagttata 1020

tgctccttca gtttgactag aaatgaaaaa tcagttaagc ctgtaacgaa atgataacct 1080

gcttcaagaa gattagacta tttttcataa aatatgcagt gccgtgaaat agatacttaa 1140

tcttaggcag gaaaaatctt ctattgggcc ataataagaa ctaccaatta gaaaggaggt 1200

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aatcataaaa ttgcttagct ttctactggc acttaaccta ctgcaaccct cctcttctgg 1440

gattccaaca caaacaacta agaggaattt gaaaaaaaga aagcaaatgt gagaagagac 1500

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actagcctat tttatttcaa ttttagctta aaatcagccc caattagccc caatttcaaa 1920

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ctta 2224

<210> 2
<211> 188
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NdeI-SmaI
fragment of tCUP (T1275)

<400> 2
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catcatcctc acctcaaaac ccaccggaat acatggcttc tcaagccgtg gaaaccttat 120

actcacctcc ctttgctctt acagtactcg gccgtcgacc gcggtacccg ggtggtcagt 180

ccccttatg 188

<210> 3
<211> 129
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: delta N with
Kozak sequence

<400> 3
agatctatcc tcttatctct caaactctct cgaaccttcc cctaacccta gcagcctctc 60

atcatcctca cctcaaaacc caccggccac catggcctct agaggacccc gggtggtcag 120

tcccttatg 129

<210> 4
<211> 119
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: deltaN without
Kozak sequence

<400> 4
agatctatcc tcttatctct caaactctct cgaaccttcc cctaacccta gcagcctctc 60

atcatcctca cctcaaaacc caccggtcta gaggatcccc gggtggtcag tcccttatg 119

<210> 5
<211> 23

<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Linker 1

<400> 5
ggatctatcc tcttatctct caa 23

<210> 6
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Linker 2

<400> 6
atctctcaaa ctctctcgaa cctt 24

<210> 7
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Linker 3

<400> 7
ttcccctaac cctagcag 18

<210> 8
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Linker 4

<400> 8
atcatcctca cctcaaaacc cacc 24

<210> 9
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Linker 5

<400> 9
agcctctcat catcctcacc tcaa 24

<210> 10
<211> 602
<212> DNA
<213> Nicotiana tabacum

<220>
<223> RENT 1

<220>
<223> where n is A, T, G or C

<400> 10
aattgtaagc gggataacaa tttcacacag gaaacagcta tgaccatgat tacgccaagc 60

ttttaatacg actcactata gggaaagctt ataattacaa aattgattct agtatttta 120

atttaatatt tttacattat taattaattt agaagtttta atttttttc agaaatcatt 180

ttactatttt tataaaaaca aaagggaaaa gtggttattt aaatactagc cctatttcat 240

ttcaattata gcctaaaatc agccccaatt aaccccaatt ccaaatttcaa acgggccagc 300

ccaattccta aaatgacccg ctcctaaccc gcttttccaa cccgcccggt ttccccttct 360

gatccaggct gttgatcatt ttgatcaacg gccagaattt ccccttttcct ttttaatttcc 420

caaacacccc ccaaccttat cccgtttctc accaaccgcc agatctatcc tcttatctct 480

caaactctct cgaaccttcc cctaacccta gcagcctctc atcatcctca cctcaaaacc 540

caccggccac catggcctct agaggatccc cgggtggtca gtcccttatg ttacgtcctn 600

aa 602

<210> 11
<211> 610
<212> DNA
<213> Nicotiana tabacum

<220>
<223> RENT 2

<400> 11
atgttgtgtg gaattgtgag cgggataaca atttcacaca ggaaacagct atgaccatga 60

ttacgccaag ctctaatacg actcactata gggaaagctt ataattacaa aattgattct 120

agtatttttа atttaatatt tatacattat taattaactt agtactttca attcgttttc 180

aaaaattatt ttactatttt ttgtaaaata aaagggagaa aatggctatt taaatactag 240

ccctatttta tttcaatttt agcctaaaat cagcccccaa ttaaccccaa tttcaaattc 300

aaatgggaca gcccaattcc taaaataacc cgcccctaac cctcttatcc aacccacccg 360

atttcccctt ttgatccagg ttgttgatca ttttgatcaa cgaccagaat ttccccccttc 420

ctgtttttaa ttcccaaaca cccccccaacc ctatcccatt tctcaccaac cgccagatct 480

atcctcttat ctctcaaact ctctcgaacc ttcccctaac cctagcagcc tctcatcatc 540

ctcacctcaa aacccaccgg ccaccatggc ctctagagga tccccgggtg gtcagtccct 600

tatgtgcgtc 610

<210> 12
<211> 507
<212> DNA
<213> Nicotiana tabacum

<220>
<223> where n is A, T, G or C

<220>
<223> RENT 3

<400> 12
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ttgttttcag aaattatttt actatttttt ataaaataaa agggagaaaa tggctattta 120

aataccagcc ctatttttatt tcaattttaa cctaaaatca gccccagtta gccccaaacg 180

gcccatccca attcctaaaa taactcgccc ctaacccgct tatccaaccc gcccggttcc 240

ccttttgatc caggccgttg atcattttga tcaacgacca gaatttcccc tttcctttct 300

taattcccaa acaccgccaa acctatccca tttctcacca accgccagat ctatcctctt 360

atctctcaaa ctctctcgaa ccttccccta accctagcag cctctcatca tcctcacctc 420

aaaacccacc ggccaccatg gcctctagag gatccccggg tggtcagtcc cttatgtnac 480

gncctaaatg nccgncctgn nnnnnnc 507

<210> 13
<211> 599

<212> DNA
<213> Nicotiana tabacum

<220>
<223> RENT 5

<400> 13
ggaattgtga gcggataaca atttcacaca ggaaacagct atgaccatga ttacgccaag 60

ctctaatang actcactata gggaaagctt ataattacaa atttgattct agtatttta 120

atttaatatt tatacattat taattaattt agtactttca atttgttttc agaaatcatt 180

ttactatggt ttataaaata aaagggagaa aatggctatt taaatactag ccctatttta 240

tttcaatttt agcctaaaat cagccccaat taacccctat ttcaaattca aacgggctag 300

cccagttcct aaaataaccc tcccctaacc cgcttatcca acccgccctg tttccccttt 360

tgatccaggc cgttgatcat tttgatcaac gaccaaaatt tccccttttcc ttttttaatt 420

cccaaacacc cccaacccta tcccatttct caccaaccgc cagatctatc ctcttatctc 480

tcaaactctc tcgaaccttc ccctaaccct agcagcctct catcatcctc accttaaaac 540

ccaccggcca ccatggcctc tagaggatcc ccgggtggtc agtcccttat gttacgtcc 599

<210> 14
<211> 616
<212> DNA
<213> Nicotiana tabacum

<220>
<223> where n is A, T, G or C

<220>
<223> RENT 7

<400> 14

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aacagctatg accatgatta cgccaagctc taatacgact cactataggg aaagcttata 120

attacaaaat tgattatagt acttttaatt taatatttat acattattaa ttaatttagc 180

actttcaatt tattttcaga aaccatttta ctatttttta taaaataaaa gggacaaaat 240

ggctatttaa ataccaacac tattttattt caattttagc ctaaaatcaa acccaattaa 300

ccccaaacgg gccagcccaa ttcctaaaac aacccgcccc taacccgctt atccaacccg 360

cccgatttcc tcttttgatc caggccgttg atcattttga tcaacggcca gaatttcccc 420

tttcctttct tcattcccaa acacccccaa acctatccca tttctcacca accgccagat 480

ctatcctctt atctctcaaa ctctctcgaa ccttcccctа accctagcag cctctcatca 540

tcctcacctc aaaacccacc ggccaccatg gcctctagag gatccccggg tggtcagtcc 600

cttatgttac gtcctn 616

<210> 15
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: SCAN 1

<400> 15
aagactcaaa ctctctcgaa cctt 24

<210> 16
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: SCAN 2

<400> 16
atctgagaaa ctctctcgaa cctt 24

<210> 17
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: SCAN 3

<400> 17
atctctcggg ctctctcgaa cctt 24

<210> 18
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: SCAN 4

<400> 18
atctctcaaa gagtctcgaa cctt 24

<210> 19
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: SCAN 5

<400> 19
atctctcaaa ctcagacgaa cctt 24

<210> 20
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: SCAN 6

<400> 20
atctctcaaa ctctctgcta cctt 24

<210> 21
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: SCAN 7

<400> 21
atctctcaaa ctctctcgag agtt 24

22
47
DNA
Artificial Sequence

Description of Artificial Sequence: 2xL2

22
ATCTCTCAAACTCTCTCGAACCTTTCTCTCAAACTCTCTCGAACCTT

23

24
DNA
Artificial Sequence

Description of Artificial Sequence: B1-L2

23
ATCTCTCAAACTATCTGAAACTT

24
24
DNA
Artificial Sequence

Description of Artificial Sequence: B7-L2

24
ATCTCTCAAACTCTCTCAAACTTT

25
21
DNA
Artificial Sequence

Description of Artificial Sequence: L2D1

25
ATCTCTCCTCTCTCAAACTTT

26
21
DNA
Artificial Sequence

Description of Artificial Sequence: L2D2

26
ATCTCTCAAACTCTCTCGATT

27
18
DNA

Artificial Sequence

Description of Artificial Sequence: L2D3

27
ATCTCTCCTCTCTCGATT